

State of West Virginia
 Division of Environmental Protection
 Section of Oil and Gas
 Well Operator's Report of Well Work

18

Farm Name: Manchin, John II Operator Well No.: Snider 2044 REV

LOCATION: Elevation: 1,310' Quadrangle: Shinnston
 District: Lincoln County: Marion
 Latitude: 108' feet South of 39 DEG. 30 MIN. SEC.
 Longitude: 10,180' feet West of 80 DEG. 15 MIN. SEC.

Company: Linn Operating, Inc
PO Box 1008
Jane Lew, WV 26378

Agent: Gary Beall
 Inspector: Bill Hatfield
 Permit Issued: January 30, 2007
 Well Work Commenced: September 14, 2007
 Well Work Completed: September 22, 2007
 Verbal Plugging: _____
 Permission granted on: _____
 Rotary X Cable _____
 Total Depth (feet) 4,650'
 Fresh Water Depths (ft) 193', 590'
 Salt Water Depths (ft) None
 Is coal being mined in area (Y / N) ? No
 Coal Depths (ft) N/A

Casing & Tubing Size	Used in Drilling	Left In Well	Cement Fill Up Cu. Ft.
13 3/8"	44'	44'	
9 5/8"	620'	620'	200 sks
7"	1,730'	1,730'	140 sks
4 1/2"	4,195'	4,195'	142 sks

OPEN FLOW DATA

Producing Formation Balltown, Speechley, 5th Sand, Lower Gordon, 30 ft Sand, 50 ft Sand
 Gas: Initial Open Flow Show MCF/d
 Final Open Flow Show MCF/d
 Time of open flow between initial and final tests _____ Hours
 Static rock pressure N/A psig surface pressure after 24 Hours

Pay Zone
 Depth (ft) 2,574'-4,098'
 Oil: Initial Open Flow Show Bbl/d
 Final Open Flow Show Bbl/d
 _____ Hours

Second Producing Formation _____
 Gas: Initial Open Flow _____ MCF/d
 Final Open Flow _____ MCF/d
 Time of open flow between initial and final tests _____ Hours
 Static rock pressure _____ psig surface pressure after _____ Hours

Pay Zone
 Depth (ft) _____
 Oil: Initial Open Flow _____ Bbl/d
 Final Open Flow _____ Bbl/d
 _____ Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1.) DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2.) THE WELL LOG WHICH IS SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE

For: Linn Operating, Inc.

By: *[Signature]* Drilling Superintendent
 Date: 6-12-09

Stage	Formation	Depth & No. of Shots	Treatment Detail
1	Balltown	3,940'- 4,098' 14 Shots	X-Link w/N2 Assist; Breakdwn 3035 psi; Avg Treating 2476 psi @ 23.3 bpm; 300 sks 30/50 sand; 436 bbls water; 85,100 scf N2; ISIP 1880 psi
2	Speechley	3,348'-3,370' 16 Shots	X-Link w/N2 Assist; Breakdwn 3015 psi; Avg Treating 2750 psi @ 24.7 bpm; 100 sks 30/50 sand; 333 bbls water; 64,300 scf N2; ISIP 1884 psi
3	5th Sand	3,044'-3,054' 20 Shots	X-Link w/N2 Assist; Breakdwn 2400 psi; Avg Treating 2200 psi @ 25 bpm; 200 sks 30/50 sand; 418 bbls water; 51,600 scf N2; ISIP 1700 psi
4	Lower Gordon	2,892'-2,934' 16 Shots	X-Link w/N2 Assist; Breakdwn 3550 psi; Avg Treating 3300 psi @ 24 bpm; 100 sks 30/50 sand; 320 bbls water; 48,200 scf N2; ISIP 2140 psi
5	30ft Sand	2,667'-2,270' 24 Shots	X-Link w/N2 Assist; Breakdwn 3700 psi; Avg Treating 3410 psi @ 9 bpm; 150 sks 30/50 sand; 356 bbls water; 62,400 scf N2; ISIP 2020 psi
6	50ft Sand	2,574'-2,595' 27 Shots	X-Link w/N2 Assist; Breakdwn 3480 psi; Avg Treating 3160 psi @ 21 bpm; 125 sks 30/50 sand; 315 bbls water; 65,400 scf N2; ISIP 2085 psi

FORMATION	TOP	BOTTOM	REMARKS
Fill	0	30	Red/Soft
Shale	30	1100	Gray/Soft Water 193' & 590'
Sand	1100	1210	White/Hard
Shale	1210	1402	Gray/Soft
Sand	1402	1470	White/Hard
Shale	1470	1536	Gray/Soft
Sand	1536	1609	White/Hard
Shale	1609	1890	Gray/Soft
Sand	1890	1912	White/Hard
Shale	1912	1940	Gray/Soft
Big Lime	1940	2121	Lime/Hard
Shale	2121	2570	Gray/Soft
Sand	2570	2604	White/Hard
Shale	2604	2709	Gray/Soft
Sand	2709	2741	White/Hard
Shale/Sand	2741	3038	Gray/Med
Sand	3038	3062	White/Hard
Sand/Shale	3062	4650 TD	Gray/White/Med

STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL & GAS
WELL WORK PERMIT APPLICATION

- 1) Well Operator Linn Operating, Inc.

Operator ID	049	County	District	Quadrangle
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- 2) Operator's Well Name Snider 2044 REV 3) Elevation 1,310'
- 4) Well Type: (a) Oil _____ or Gas X
 (b) If Gas: Production X Underground Storage _____
 Deep _____ Shallow X
- 5) Proposed Target Formation(s): Bradford
- 6) Proposed Total Depth: 4,550' Feet
- 7) Approximate fresh water strata depths: 500'
- 8) Approximate salt water depths: 1,650'
- 9) Approximate coal seam depths: 630'
- 10) Does land contain coal seams tributary to active mine? No
- 11) Describe proposed well work: Drill and stimulate a new well.

12) **CASING AND TUBING PROGRAM**

TYPE	SPECIFICATIONS			FOOTAGE	INTERVALS	CEMENT
	Size	Grade	Weight per ft.	For Drilling	Left in Well	Fill-up (Cu.Ft)
Conductor	13 3/8"	ERW		40'	40'	
Fresh Water						
Coal	9 5/8"	ERW	26#	700'	700'	C. T. S.
Intermediate	7"	ERW	16#	1,750'	1,750'	C. T. S.
Production	4 1/2"	M-65	9.5#		4,600'	360 Cu. Ft.
Tubing						
Liners						

Packers: Kind _____
 Size _____
 Depths Set _____

Verbal ok from BH on 4/11/07

cedr

RECEIVED
 Office of Oil & Gas
 Office of Chief
FEB 14 2007
 WV Department of
 Environmental Protection